

TEN THOUSAND TREES IN TEN YEARS

ESTABLISHING AN URBAN FOREST MASTER PLAN FOR MARCO ISLAND



Why trees matter to Marco Island

FINANCIAL & HEALTH

\$90,000 of direct benefits for every tree ([Burden](#))

50% reduction in air conditioning costs ([Burden](#))

Lengthen pavement life by 40% to 60% ([Burden](#))

12% higher income streams for businesses ([Wolf](#))

15% increase in home or business value. ([Wolf](#))

33% lower odds of rating general health as "fair" or "poor" ([Phys.org](#))

ADHD and stress reduction in adults and children ([Wolf](#))



A large tree can absorb nearly 250,000 gallons of runoff and rainfall in its lifetime

ENVIRONMENT

Reduce CO² the equivalent of 26,000 car miles per one acre of trees ([Tree People](#))

Prevent water pollution by 30% allowing water to flow down the trunk into the earth ([Burden](#))

Oxygen for 18 people, per one acre of trees ([Tree People](#))

50% reduction in UV-B radiation ([Tree People](#))

5 to 15-degree temperature reduction ([EPA](#))

Increase wildlife and natural pest control ([Tree People](#))



The Big Problem: Marco Island has extremely low tree coverage, and Florida is losing trees every day

Florida has lost **26% of its tree coverage** since 2000, and most of Marco Island has very low tree density of only 10%. The national average of tree density in major U.S. cities is 27%. ([Tree Equity](#))

Let's plant 10,000 trees on Marco Island and create a legacy for generations!

Prepared by the Marco Island Beautification Committee

How trees dramatically reduce CO2, runoff and electricity demand on Marco Island



Palm
(Royal Palm)

SAVINGS PER TREE		
1,221	CO2 Avoided (pounds)	9,000
9,000	CO2 Sequestered (pounds)	34,000
2,300	Electric Energy Saved (kWh)	7,000
215,000	Rainfall Interception (gallons)	119,000
19,000	Avoided Runoff (gallons)	11,000



Broadleaf Tree
(Magnolia)

Estimates are from i-Tree planting data, showing value over the 40-year life of a tree with a 10% mortality rate

University of Florida: Tree Species for Wind Resistance

Dicots and Conifers

Bursera simaruba, gumbo limbo
Carya Floridana, Florida scrub hickory
Conocarpus erectus, buttonwood
Chrysobalanus icaco, cocoplum
Cordia sebestena, geiger tree
Eugenia axillaris, white stopper
Eugenia confusa, redberry
Eugenia foetida, boxleaf stopper
Guaiacum sanctum, lignum vitae
Ilex cassine, dahoon holly
Krugiodendrum ferreum, ironwood
Lagerstroemia indica, crape myrtle
Magnolia grandiflora, southern magnolia
Podocarpus spp, podocarpus
Quercus virginiana, live oak
Quercus geminata, sand live oak
Taxodium ascendens, pond cypress
Taxodium distichum, bald cypress

Palms

Butia capitata, pindo or jelly
Dypsis lutescens, areca
Coccothrinax argentata, Florida silver
Hyophorbe lagenicaulis, bottle
Hyophorbe verschaffeltii, spindle
Latania loddigesii, blue latan
Livistona chinensis, Chinese fan palm^a
Phoenix canariensis, Canary Island date
Phoenix dactylifera, date
Phoenix reclinata, Senegal date palm^a
Phoenix roebelenii, pygmy date
Ptychoesperma elegans, Alexander
Sabal palmetto, cabbage, *sabal*
Thrinax morrisii, key thatch
Thrinax radiata, Florida thatch
Veitchia merrillii, Manila

^a Invasive and not recommended for use in Florida